

Work Order ID 71732

Monday, July 11, 2011 11:09:21 AM



Page 1

Item ID: D4278-047

Accept



Setup Start



Revision ID:

Stop



Item Name: Upper Rib Assembly-Straight

Start Date: 7/11/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 7/21/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date: 11-07-11

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D4277

D

D4278

C

100

Weld per dwg A/R S.S. rod Batch: M115278 0.00

Large Fab

Memo

0.00

Large Fab

- 1- Cut tube as per dwg D4277
- 2- Drill and chamfer holes on both side using DT9715
- 3- Remove marking
- 4-Deburr
- 5- Assemble bushing and weld as per dwg
- 6- Grind weld flush as per dwg

11.07.20 (1)

Pro →

110

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

8/11/2010(4) (1)

Quality Control

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: D4275-041 PAR #: _____ Fault Category: Large PAB NCR: Yes No DQA: UL Date: 11/07/20
11738 Resolution: SCRAP Disposition: SCRAP QA: N/C Closed: ✓ Date: 11-07-20

| NCR: <u>71732</u> | | WORK ORDER NON-CONFORMANCE (NCR) <u>11.27</u> | | | | | | |
|-------------------|------------|--|----------------------------------|---|-----------------|-----------------------------|-----------------------|-----------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| <u>11/7/20</u> | <u>120</u> | <u>Found At inspection that the 826 was cut @ 22.00" not 25.00 as per Dwg.</u> | <u>11.07.20</u> <u>GS/OAZ</u> | <u>SCRAP & Destroy #</u> <u>Reptu</u> <u>M 118184</u> | <u>11.07.20</u> | <u>8</u> <u>11/07/20</u> | <u>11.07.20</u> | <u>8</u> <u>11/07/20</u> |
| | | <u>Ric. LOA</u> | | <u>Bushing B 68003</u> <u>(4)</u> | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 71732

Monday, July 11, 2011 11:09:21 AM



Page 2

Item ID: D4278-047

Accept



Setup Start



Revision ID:

Stop



Item Name: Upper Rib Assembly-Straight

Start Date: 7/11/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 7/21/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

Suma/20

FO

130

Identify as per dwg & Stock Location:

B/C

0.00



Packaging

Memo

0.00

Packaging

STOCK IN BASKET CELL

PL 11-07-20

140

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/7/2011
MK
11-07-20

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Monday, July 11, 2011 11:09:28 AM

Page 1

Work Order ID: 71732

Parent Item: D4278-047

Parent Item Name: Upper Rib Assembly-Straight

Start Date: 7/11/2011

Required Date: 7/21/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 10.11.12 new issue DD verf:EC
11.01.20 AS PER DWG REV.C DD verf:EC

IPP Rev:B

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|

M304TS0.750W.049

Purchased

No

f

482.2674

2.189474



304 SQ Tube .75x.75x.049W

11.07.20

Location

Loc Qty

Loc Code

MAT018

167.087

117690

38.2654

117775

128.8216

MAT034

15.1804

117337

15.1804

WA

300

118184

300

2.189

D4021-9

Manufactured

No

100

Each

98.0000

4

4



Bushing

11.07.20

Location

Loc Qty

Loc Code

WA

96

68063

32

70333

64

WA005

2

66437

2

4

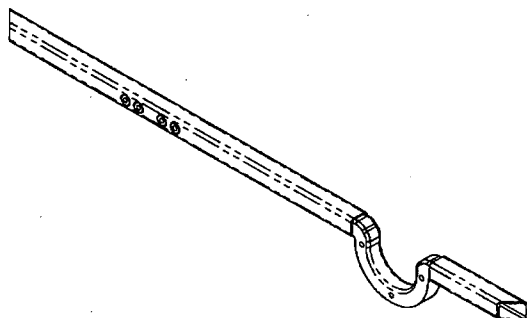
| W/O: | | WORK ORDER CHANGES | | | | | |
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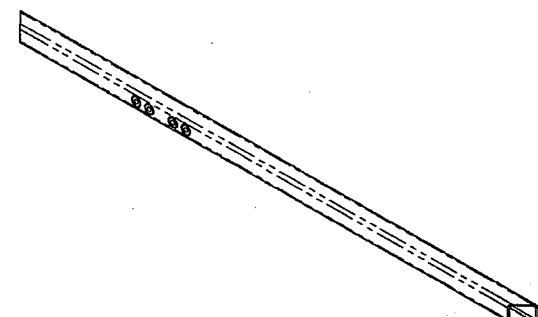
NOTE: Date & initial all entries



D4278-041 UPPER RIB ASSY-HOOP



D4278-045 RIB ASSY. FWD CHAM



D4278-047 UPPER RIB ASSY-STRAIGHT



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 71132

Handwritten: 11-07-11

RELEASED
2011-01-18
Handwritten initials: MB

| C | ADDITIONAL HOLES ADDED IN D4278-041/-047 | SC | 10.12.23 |
|------------|--|---|----------|
| B | RMV -043 (OBSOLETE) | CP | 10.11.30 |
| A | NEW ISSUE | SC | 10.11.25 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | JPH | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D4278 RIB ASSEMBLY <small>COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> | |
| DRAWN | SC | | |
| CHECKED | <i>[Signature]</i> | | |
| MFG. APPR. | <i>[Signature]</i> | | |
| APPROVED | <i>[Signature]</i> | | |
| DE APPR. | <i>[Signature]</i> | REV. C SHEET 1 OF 4 SCALE NTS | |
| DATE | 10.12.23 | | |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
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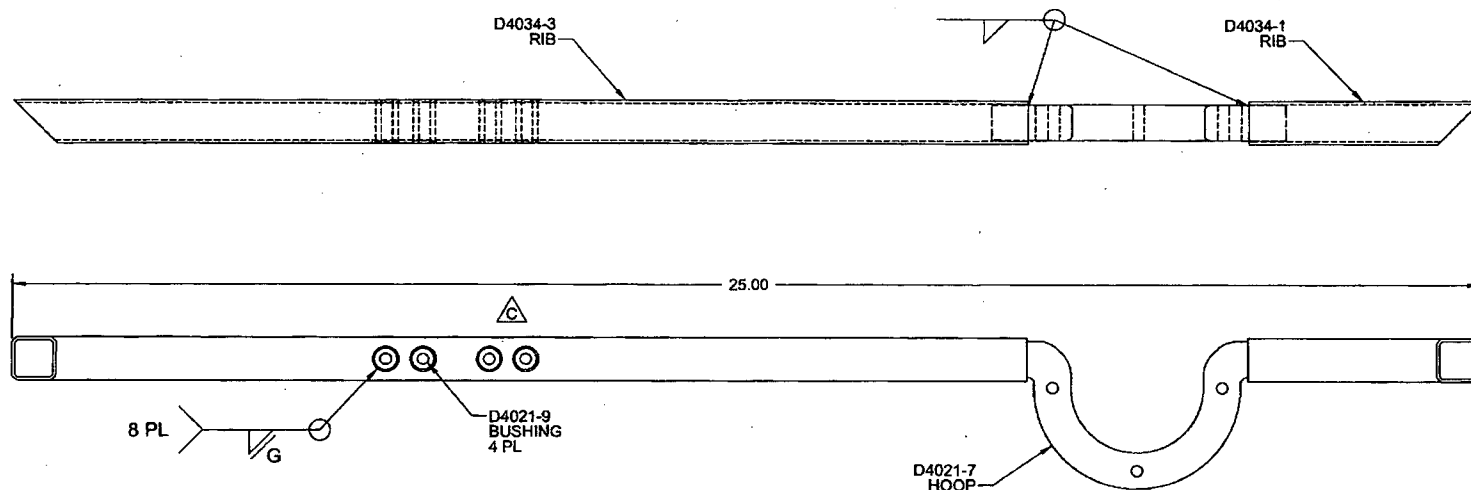
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

| ITEM | QTY | PART NUMBER | DESCRIPTION |
|------|-----|-------------|---------------------|
| | | D4278-041 | UPPER RIB ASSY-HOOP |
| 1 | 1 | D4021-7 | HOOP |
| 2 | 4 | D4021-9 | BUSHING |
| 3 | 1 | D4034-1 | RIB |
| 4 | 1 | D4034-3 | RIB |



D4278-041 UPPER RIB ASSY-HOOP

71732

RELEASED
R 2011-01-18 D

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.61 lbs
- 8) WELD PER DART QSI 004

| | | | |
|------------|----------|--|--------------|
| DESIGN | JPH | DART AEROSPACE LTD | |
| DRAWN | SC | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | | DRAWING NO. | REV. C |
| MFG. APPR. | | D4278 | SHEET 2 OF 4 |
| APPROVED | | TITLE | SCALE |
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| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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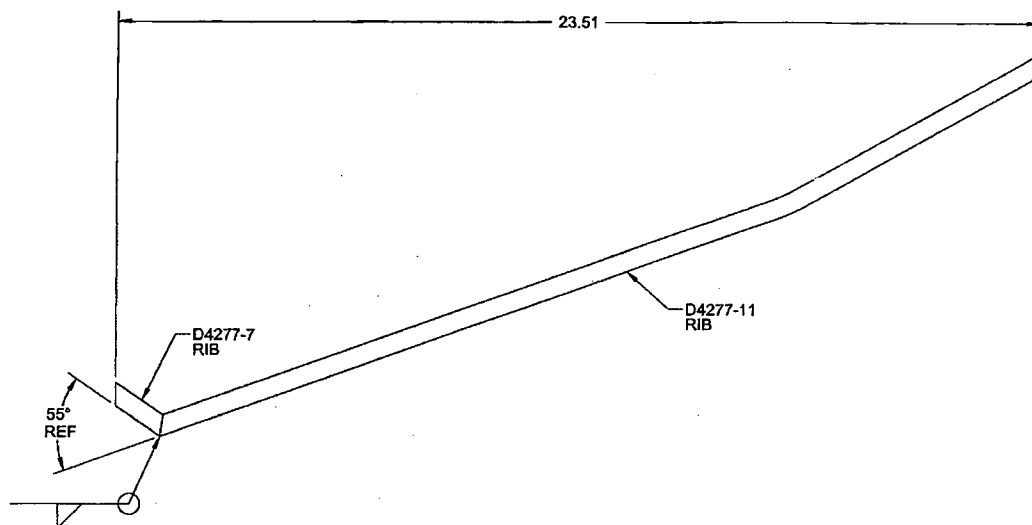
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

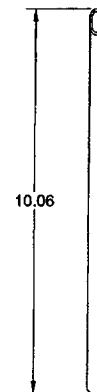
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NOTE: Date & initial all entries

| ITEM | QTY | PART NUMBER | DESCRIPTION |
|------|-----|-------------|-----------------------|
| | | D4278-045 | RIB ASSY, FWD CHAM |
| 1 | 1 | D4277-7 | MID CORNER RIB, NOTCH |
| 2 | 1 | D4277-11 | MID DIAG RIB |



D4278-045 RIB ASSY, FWD CHAM



NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.57 lbs
- 8) WELD PER DART QSI 004.

| | | | |
|------------|----------|--|--------------|
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| DRAWN | SC | | |
| CHECKED | | DRAWING NO. | REV. C |
| MFG. APPR. | | D4278 | SHEET 3 OF 4 |
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2011-01-18

71732

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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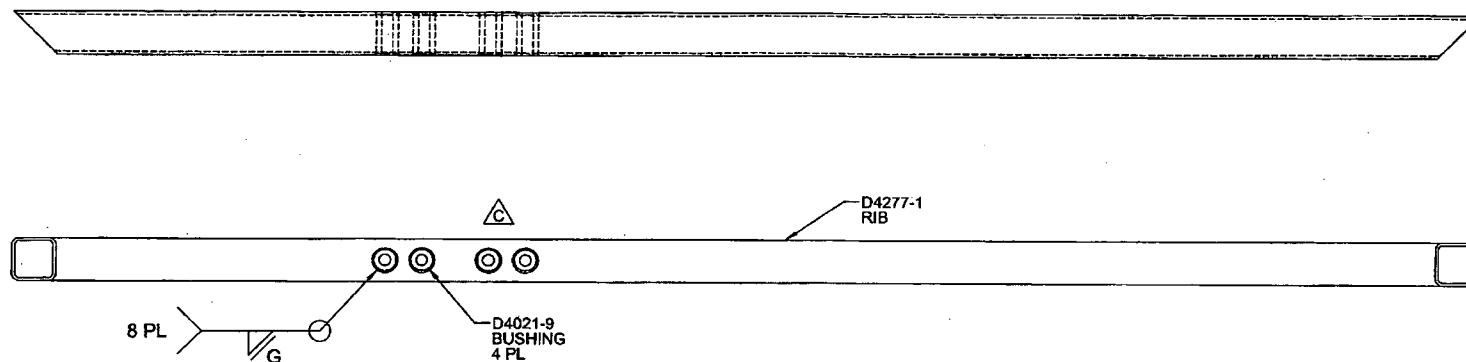
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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| | | | | | | | | |

NOTE: Date & initial all entries

| ITEM | QTY | PART NUMBER | DESCRIPTION |
|------|-----|-------------|-------------------------|
| | | D4278-047 | UPPER RIB ASSY-STRAIGHT |
| 1 | 4 | D4021-9 | BUSHING |
| 2 | 1 | D4277-1 | RIB |



D4278-047 UPPER RIB ASSY-STRAIGHT

11737

RELEASED
2011-01-18
MD

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.95 lbs
- 8) WELD PER DART QSI 004.

| | | | |
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| DESIGN | JPH | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWN | SC | | |
| CHECKED | | DRAWING NO. | REV. C |
| MFG. APPR. | | D4278 | SHEET 4 OF 4 |
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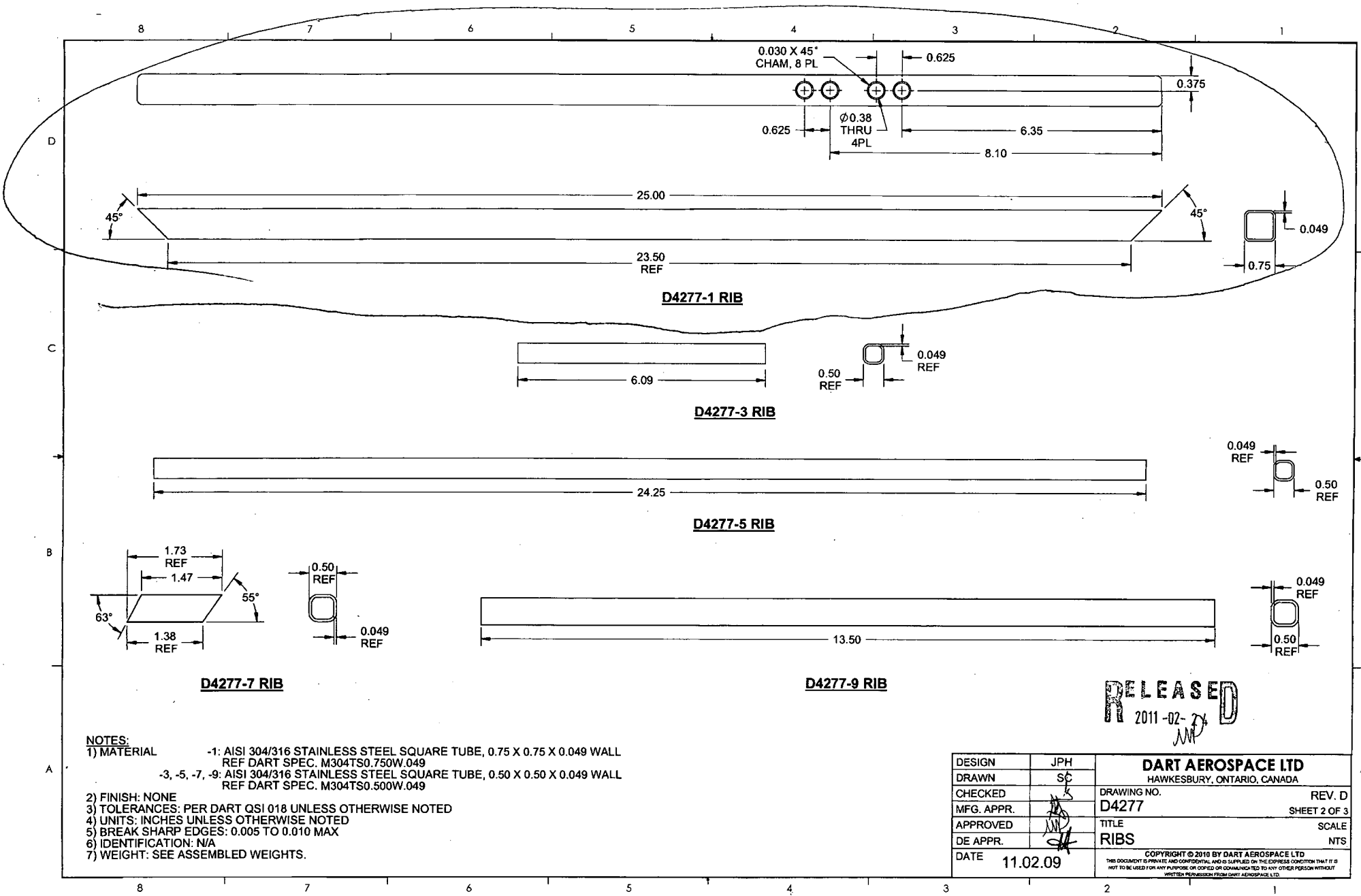
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NOTE: Date & initial all entries



D4277-7 RIB

D4277-1 RIB

D4277-3 RIB

D4277-5 RIB

D4277-9 RIB

NOTES:

- 1) MATERIAL
 - 1: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.049 WALL
REF DART SPEC. M304TS0.750W.049
 - 3, -5, -7, -9: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.50 X 0.50 X 0.049 WALL
REF DART SPEC. M304TS0.500W.049
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: SEE ASSEMBLED WEIGHTS.

RELEASED
2011-02-27

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| DESIGN | JPH | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWN | SC | | |
| CHECKED | SC | DRAWING NO. | REV. D |
| MFG. APPR. | SC | D4277 | SHEET 2 OF 3 |
| APPROVED | MP | TITLE | SCALE |
| DE APPR. | MP | RIBS | NTS |
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